

Claims

[c1] What is claimed is:

1. An aperture plate for optical lithographic systems, comprising:
an opaque plate having thereon a central pole aperture;
and
a set of four sector apertures having substantially the same opening angle θ , wherein said sector apertures radiating from a center point of said pole aperture communicate with said central pole aperture; wherein said aperture plate when in combination with conventional light and an annular light can provide Bow-Pole and Quasar illumination.

[c2] 2. The aperture plate for optical lithographic systems according to claim 1 wherein dimension of said central pole aperture is determined by a sigma σ_{inner} value.

[c3] 3. The aperture plate for optical lithographic systems according to claim 1 wherein dimension of each of said sector apertures is determined by a sigma σ_{outer} value.

[c4] 4. The aperture plate for optical lithographic systems according to claim 1 wherein said opening angle θ is about

35°.